ABSTRACT

Polypeptides, in particular the polypeptide of formula I:

Ala-Gln-Glu-Pro-Val-Lys-Gly-Pro-Val-Ser-Thr-Lys-Pro-Gly-Ser-Cys-Pro-Ile-Ile-Leu-Ile-Arg-Cys-Ala-Met-Leu-Asn-Pro-Pro-Asn-Arg-Cys-Leu-Lys-Asp-Thr-Asp-Cys-Pro-Gly-Ile-Lys-Lys-Cys-Cys-Glu-Gly-Ser-Cys-Gly-Met-Ala-Cys-Phe-Val-Pro-Gln

and analogues thereof which possess inhibitory activity against human leukocyte elastase. The polypeptides may be obtained by expression using plasmidic expression systems in hosts such as E. Coli and yeast, the polypeptide of formula I being also obtainable from psoriatic plaques.